

**TESTIMONY OF
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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**SPEAKING IN SUPPORT OF L.D. 1849
RESOLVE, REGARDING LEGISLATIVE REVIEW OF
CHAPTER 355: SAND DUNE RULES, A MAJOR
SUBSTANTIVE RULE OF THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

**BEFORE THE
JOINT STANDING COMMITTEE
ON
NATURAL RESOURCES**

INTRODUCER: REPRESENTATIVE KOFFMAN OF BAR HARBOR

DATE OF PUBLIC HEARING: MARCH 2, 2004

Senator Martin, Representative Koffman and Members of the Natural Resources Committee, I am Andrew Fisk, director of the Bureau of Land and Water Quality at the Department of Environmental Protection, speaking in support of L.D. 1849.

LD 1849 is a resolve asking you to enact rules that were provisionally adopted by the Board of Environmental Protection this past June. These rules govern how structures are to be constructed or reconstructed within the State's sand dune systems, and they are

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authorized by the Natural Resources Protection Act. The NRPA states these sand dunes are resources of state significance and their protection and enhancement are relevant to not only our environment, but our health, safety, and welfare [38 MRSA Section 480-A].

Why are we here today with these provisionally adopted rules? You will recall there was a bill last session that sought to make some statutory changes to the NRPA regarding sand dunes that was introduced during the Board's rulemaking process. You amended and passed that bill to not make any statutory changes, but rather asked that the Board of Environmental Protection's rules come back to you for final adoption as major substantive rules.

Before getting to the provisional rules and some proposed changes that the Baldacci Administration would like to make, let me first reassure the Committee we are not here seeking to eliminate rebuilding opportunities in sand dune systems. We are suggesting making substantive changes to the rebuild provisions for *one* area of the sand dune system. We are not here today seeking to unravel a great deal of hard work by the Department, the Board, citizens, environmental organizations, and coastal property owners.

But aren't these changes happening at a late date? And why is the Administration making these changes at all, given that these rules have been through the Board?

The "why" first. These rules began under the prior Administration and upon taking office, staff at the DEP and DOC began to review all pending policy initiatives at their respective departments. As part of that review the policy decisions within the then pending provisional rules were highlighted for further assessment. When I took over the Bureau Director's position and at the request of the Commissioners of Conservation and Environmental Protection, I began working with staff from the State Planning Office and the Department of Conservation to conduct an internal assessment because we did not

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feel the proposed allowance of unlimited rebuilding of severely damaged homes from ocean storms in frontal dunes to be in keeping with clear purpose of the NRPA.

I would not be straight up with you if I said these were not new to everyone outside of the Administration. Stakeholders were just informed of these changes on Friday at a meeting with the Governor's staff. I really wish we had been able to get our thoughts on the provisionally adopted rules in front of people earlier. But we were not, in large part because we spent a great deal of time working through proposed options and ensuring the language was well-crafted and passed legal muster. My apologies if people feel "jumped" by this proposal.

Let me walk through the issues here first, and then I will offer up a proposed course of action that will give us all some opportunity to give our ideas their due. These rules are important and need to be carefully considered.

Some background on sand dunes here in Maine.

While there are about 3,500 miles of shoreline in Maine, only 70 miles or 2% are sand beach. Another way to look at it is to note that only about 2,000 of our State's 20 million acres are in the sand dune system. From a geological perspective, dunes are very dynamic. They form through storm action and respond to surf and rising sea level. Summer conditions usually build up the reserve of sand in a natural beach system. During winter storms this reserve is sacrificed to waves, expending energy, altering the beach profile, and reducing the storm's impact to more landward areas. The most seaward ridge of dune sand, the frontal dune, is the most dynamic portion of the system.

In response to sea-level rise in the next century, the beach and dune system will migrate inland as less severe storms reach higher and farther in the system and overwash becomes more frequent. Unlike most terrestrial systems, the coastal dune system moves over the

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landscape and across property boundaries. This migrating dune system is difficult to preserve.

However, it needs to be protected and restored. A healthy dune system protects property by reducing the energy of storm waves. It is the best defense against coastal flooding, erosion, and sea-level rise. It provides tremendous economic benefit to the local economy. A healthy coastal sand dune system is also the least costly way to maintain a recreational beach for future generations.

If you would allow me to use some illustrations in your packet to point out the relevant parts of the sand dune system for this hearing.

Please note you have 3 colored graphics in your packet, indicated by the yellow post-it note. If you could please find the first one, which says, "1983 & 1988 Dune Rules" in the upper right corner.

Coastal sand dune systems are sand and gravel deposits within a marine beach system, including but not limited to, beach berms, frontal dunes, dune ridges, back dunes and other sand and gravel areas deposited by wave or wind action. Coastal sand dune systems may extend into coastal wetlands.

The "frontal dune" is the area consisting of the most seaward ridge of sand and gravel and includes the frontal dune areas modified by development. The frontal dune may or may not be vegetated with dune vegetation and may consist in part or whole of artificial fill.

A "V-Zone" is the land area of special flood hazard subject to a one-percent or greater chance of flooding in any given year, and subject to additional hazard from high velocity wave action. Wave heights or wave run-up depths are equal to or greater than 3 feet in V-Zones.

Administration proposed changes to provisional rules

Sticking with the three graphics in front of you, I'd like to walk you through the sand dune rules since 1983 so you can get a clear idea of what we are proposing for changes.

Again, using the "1983-1988" graphic, note that the first set of sand dune rules were enacted in response to the storm of 1978 to both protect coastal resources and minimize future losses of property. The important elements are shown graphically here. Note very simply that until 2003 if your home was severely damaged by an ocean storm, you could not rebuild anywhere in the frontal dune, including the v-zone. You were also prohibited from building new buildings in the frontal dune. There were constitutional problems with this rule, however, that made the State liable to a takings claim because there was not a variance provision. This was one of the concerns that drove the Department to make changes to the rule beginning in 2002.

The second graphic illustrates the provisionally adopted rules as they were approved by the Board of Environmental Protection in 2003. Note here how rebuild provisions for structures for severely damaged by ocean storms have been significantly changed to **allow** rebuilding in the frontal dune, including the v-zone. The Administration does not support the significant change in the rules to allow unlimited rebuilds in the frontal dune system outside of v-zones.

If you look at the third graphic, you will see what the Administration is recommending as a change to the provisionally adopted rules regarding rebuilds in the frontal dune. Note the text that is highlighted here to show that we are recommending a one-time rebuild to certain standards to minimize impact to the dune system. Following that, all further rebuilds would have to be by variance. We have added standards for these reconstructions that require the building to be moved back to the extent practicable, and if in the V-zone the building must be designed to minimize intrusion into the V-zone to the

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extent practicable. The Department may also require sand dune mitigation or enhancement for these reconstructions.

These are reasonable and appropriate changes to the provisional rules to better protect the important functions and features of a frontal dune, as well as provide landowners use of their property.

We are also recommending changes to the manner in which V-zones are designated in these rules.

We are proposing to eliminate statutory language in Section 480-E of the NRPA that prohibits using V-Zones first designated after January 1, 1999 by the Federal Emergency Management Agency (FEMA) for the National Flood Insurance Program.

In 1999 FEMA issued new flood zone maps for a town in coastal Maine that redefined the V-Zone using modern techniques and up-to-date information on recent storm damage. Under the old maps, significant claims were showing up in C-Zones, or areas that were not deemed to be flood prone. However the process did not go well. The town rightfully and successfully appealed the map revision process because they were not involved early in the process and the resulting maps did not entirely reflect local conditions. With a better map modernization process underway with significant funding from Congress, FEMA has committed to integrating community and state partners into the mapping process to build on local knowledge and efforts. FEMA has improved the outreach process for generating input from the community and community groups.

This present statutory provision in 480-E requires us to use out-of-date information. Maine's Flood Insurance Rate Maps (FIRMs) are aging. In the ideal world, once a 100-year flood elevation is established and a Flood Zone is determined they should remain static for as long as the landscape remains the same and development stays constant. Being able to rely on a map like that would make life easier. But that is not the real

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world. Technology has improved, modeling has been refined, history has provided more records of storm and flooding events, land forms change and development can drastically alter the existing determinations.

Since the prohibition in statute on using V-Zones defined after January 1, 1999 was adopted before the improved map modernization process, it is now prudent to remove this prohibition and allow all involved in coastal management the opportunity to use the best available information to address issues. It should be noted that FEMA requires communities to use the best information available in developing their flood plain ordinances -- we should adhere to that same standard in our State rules.

One final element of this Administration's position on development in the sand dune system is rather obliquely referenced in a note on page 11. Over the last year staff at DOC, SPO, and DEP have begun to frame out a voluntary program that can provide funding to willing sellers looking for options other than rebuilding severely damaged buildings. Outside of the regulatory process we intend to develop a program that will:

- Identify repetitive loss structures, and structures in the frontal dune
- Create focal areas for potential acquisition
- Beef up the coastal component of the state hazard mitigation plan to direct spending of federal dollars
- Meet with the Land for Maine's Future Board to begin crafting a potential program to acquire properties for dune enhancement and public access
- Publicize existing and new funding sources to relevant property owners
- Monitor storm damage to structures and increase mitigation efforts as they are identified.

Important elements of the provisional rules

Having pointed out our differences with the provisional rules let me walk you through some areas of the provisional rule that are very important improvements. They include:

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- A requirement that new and reconstructed structures in frontal dune and unstable back dune areas be elevated on post or pile foundations. This provision improves the ability of sand and water to move freely within the beach system as well as the ability of those structures to withstand coastal flood hazards.
- An allowance for new construction in the frontal dune area on vacant lots that are developed on either side. A hardship variance has been established for new construction on vacant lots elsewhere in the frontal dune system.
- Removing the existing exemption for second story additions or the addition of dormers. All such construction would require a permit and would be required to meet the requirements for post or pile foundations. A variance provision has been added to allow for other types of foundations to address undue hardship.
- A change in how property value is determined. The exemption in the existing rules for maintenance and repair, as well as the prohibition for reconstruction of buildings damaged by more than 50% by an ocean storm, relies on a determination of appraised market value. The proposed rule allows for a building's value to be determined in either of two ways. The value of a building may be the assessed value as established by the municipality and adjusted by the State's certified ratio or it may be the appraised value as established by an appraised market value assessment completed by a State certified appraiser within the previous five years prior to the date an application is received by the Department.
- Exemptions to allow for the construction of ramps, fire escapes and other structures in frontal dunes to meet the Americans With Disabilities Act and local fire code requirements.

Recommended process

Since there has not been enough time for representatives of coastal property owners or interested organizations to fully digest this proposal, we are recommending that a group be convened to talk through the changes proposed here today and report back to you at the end of the month. I would recommend that DEP, DOC, and SPO work with representatives of coastal property owners and Maine Audubon and several legislators from this committee to review these changes and report back to you whether we can reach consensus on these changes.

Lastly, let me point out that you have two appendices on colored paper. The pink copy is the “1983 – 1988” sand dune rules in effect presently. The yellow copy are the provisionally adopted rules with underline and strike-out language to show the Administration’s proposal.

You also have amendment language attached on the v-zone maps and a reporting requirement for DEP.

Thank you. I would be happy to answer any questions.